Amendments to the Claims:

This listing of the claims will replace all prior versions and listing of claims in the subject application.

Please cancel claims 1 to 137 without prejudice or disclaimer.

Please add new claims 138 to 182 as follows:

Claims 1 to 137. (canceled).

138. (new): A method for reducing the level of active biological contaminants or pathogens in a tissue, comprising:

(i) contacting the tissue with thiourea; and

(ii) irradiating the tissue with a suitable dose of gamma radiation effective to reduce the level of the active biological contaminants or pathogens in the tissue.

139. (new): The method of claim 138, wherein the tissue is hard tissue.

140. (new): The method of claim 139, wherein the hard tissue is selected from the group consisting of bone, demineralized bone matrix, joints, femurs, femoral heads and teeth.

141. (new): The method of claim 140, wherein the hard tissue is selected from the group consisting of bone and dimineralized bone matrix.

142. (new): The method of claim 138, wherein the tissue is soft tissue.

143. (new): The method of claim 142, wherein the soft tissue is selected from the group consisting of bone marrow, ligaments, tendons, nerves, skin grafts, heart valves, cartilage, corneas, arteries and veins.

144. (new): The method of claim 143, wherein the soft tissue is selected from the group consisting of ligaments and tendons.

145. (new): The method of claim 138, wherein the tissue is a combination of hard and soft tissue.

146. (new): The method of claim 138, wherein the tissue is at a temperature below its freezing point during irradiation.

147. (new): The method of claim 138, wherein the tissue is maintained in an inert atmosphere during irradiation.

148. (new): The method of claim 138, wherein the tissue is maintained under vacuum during irradiation.

149. (new): A method for reducing the level of active biological contaminants or pathogens in a protein sample, comprising:

(i) contacting the protein sample with thiourea; and

(ii) irradiating the protein sample with a suitable dose of gamma radiation effective to reduce the level of the active biological contaminants or pathogens in the protein sample.

150. (new): The method of claim 149, wherein the protein sample is at a temperature below its freezing point during irradiation.

151. (new): The method of claim 149, wherein the protein sample is maintained in an inert atmosphere during irradiation.

152. (new): The method of claim 149, wherein the protein sample is maintained under vacuum during irradiation.

153. (new): The method of claim 149, wherein the protein sample contains one or more proteins.

154. (new): The method of claim 153, wherein the one or more proteins is at least one member selected from the group consisting of an antibody, immunoglobulin, hormone, growth factor, anticoagulant, clotting factor and complement protein.

155. (new): The method of claim 154, wherein the clotting factor is at least one member selected from the group consisting of Thrombin, Factor II, Factor V, Factor VII, Factor VIIa, Factor VIII, Factor IX, Factor X, Factor XIII, Factor XIIIa, Von Willebrand Factor, Fibrin and Fibrinogen.

156. (new): The method of claim 154, wherein the immunoglobulin is a polyclonal immunoglobulin, a monoclonal immunoglobulin or mixtures thereof.

157. (new): The method of claim 154, wherein the immunoglobulin is at least one member selected from the group consisting of immunoglobulin G, immunoglobulin M, immunoglobulin A and immunoglobulin E.

158. (new): The method of claim 153, wherein the one or more proteins is at least one member selected from the group consisting of protein C, protein S, alpha-1 anti-trypsin (alpha-1 protease inhibitor), heparin, insulin, butyl-cholinesterase, warfarin, streptokinase, tissue plasminogen activator (TPA), erythropoietin (EPO), urokinase, neupogen, antithrombin-3, alpha-glucosidase and albumin.

159. (new): The method of claim 153, wherein the one or more proteins is produced by recombinant methods.

160. (new): A method for reducing the level of active biological contaminants or pathogens in plasma or serum, comprising:

(i) contacting the plasma or serum with thiourea; and

(ii) irradiating the plasma or serum with a suitable dose of gamma radiation effective to reduce the level of the active biological contaminants or pathogens in the plasma or serum.

161. (new): The method of claim 160, wherein the serum is fetal bovine serum.

162. (new): The method of claim 160, wherein the plasma or serum is at a temperature below its freezing point during irradiation.

163. (new): The method of claim 160, wherein the plasma or serum is maintained in an inert atmosphere during irradiation.

164. (new): The method of claim 160, wherein the plasma or serum is maintained under vacuum during irradiation.

165. (new): The method of claim 138, 149 or 160, wherein the thiourea is at a concentration of least about 20 mM.

166. (new): The method of claim 138, 149 or 160, wherein the thiourea is at a concentration of least about 50 mM.

167. (new): The method of claim 138, 149 or 160, wherein the thiourea is at a concentration of at least about 100 mM.

168. (new): The method of claim 138, 149 or 160, further comprising contacting the tissue, protein sample, plasma or serum with at least one additional stabilizer.

169. (new): The method of claim 168, wherein the at least one additional stabilizer is selected from the group consisting of DMSO, mannitol and trehalose.

170. (new): The method of claim 138, 149 or 160, further comprising contacting the tissue, protein sample, plasma or serum with one or more sensitizers.

171. (new): The method of claim 138, 149 or 160, wherein the tissue, protein sample, plasma or serum contains one or more residual solvents.

172. (new): The method of claim 171, wherein the one or more residual solvents is water.

173. (new): The method of claim 171, wherein the one or more residual solvents is an organic solvent.

174. (new): The method of claim 171, wherein the one or more residual solvents is present in an amount of less than about 2.0 percent.

175. (new): The method of claim 171, wherein the one or more residual solvents is present in an amount of less than about 1.0 percent.

176. (new): The method of claim 171, wherein the one or more residual solvents is present in an amount of less than about 0.5 percent.

177. (new): The method of claim 171, wherein the one or more residual solvents is present in an amount of less than about 0.2 percent.

178. (new): The method of claim 138, 149 or 160, wherein the tissue, protein sample or plasma or serum is irradiated for a sufficient amount of time to reduce the level of the active biological contaminants or pathogens in the tissue, protein sample or serum.

179. (new): The method of claim 138, 149 or 160, wherein the gamma irradiation is applied at a rate of at least about 3.0 kGy/hour to at least about 30.0 kGy/hour.

180. (new): The method of claim 138, 149 or 160, wherein the rate of the gamma irradiation is at least about 3.0 kGy per hour.

181. (new): The method of claim 138, 149 or 160, wherein the rate of the gamma irradiation is at least about 6.0 kGy per hour.

182. (new): The method of claim 138, 149 or 160, wherein the rate of the gamma irradiation is at least about 30 kGy per hour.